

AASHTO Domestic Scan Proposal Form

AASHTO is soliciting topic proposals for a US Domestic Scan Program, loosely modeled after the existing FHWA/AASHTO/NCHRP International Technology Scanning Program. Each selected scan topic will be investigated through site visits to three to six locations over a one or two week period, conducted by a group of eight to 12 transportation professionals with expertise in the selected topic area. Proposed topics should meet the following criteria:

- Address an important and timely need for information by transportation agencies;
- Are of interest to a broad national spectrum of people and agencies;
- Are complex and also “hands-on,” meaning they lend themselves particularly well to exploration through on-site visits; and
- Are sufficiently focused that the tour participants are able to investigate and understand key issues in the limited time available on the tour.

Proposals should be returned to kenk@aaashto.org no later than August 26, 2005.

Proposal Contact Information

Name: Mr. Kirk Steudle,
Title: Chair, AASHTO Subcommittee on Asset Management (Chief Deputy Director,
Michigan DOT)

Address: Michigan DOT, 425 West Ottawa St., PO Box 30050, Lansing, MI 48913

E-mail: steudlek@michigan.gov

Telephone number: 517-373-2384

Date of submission: July 22, 2005

Title of Proposed Scan

Transportation Asset Management (Best practices in State DOTs and local agencies)

Problem Statement (What topic is to be examined? What drives the need for the scan? Why now?)

This study will focus on the application of Transportation Asset Management in the allocation of transportation resources. State and local entities are facing increasing demands on their aging transportation infrastructure with limited resources. It is essential that State and local transportation agencies take a strategic approach managing their transportation infrastructure focusing on business processes for resource allocation and utilization with the objective of better decision-making based upon quality information and well defined objectives

Scan Scope (What specific subject areas are to be examined? Which cities and states might be visited? Which agencies/organizations (including specific departments or types of staff if applicable)?

Develop and document how Asset Management techniques and applications have been implemented and used by State and local transportation agencies. State and local entities targeted for review will exhibit: (1) widespread progress in establishing Transportation Asset Management; (2) high-level ongoing activities intended to encourage acceptance and facilitate implementation.

Items to be reviewed include:

- Approach used to gain acceptance of Transportation Asset Management decision-making process.
- Strategies for dealing with its long-term orientation.

- Programs to develop component tools in real world settings in the US.
- Where Transportation Asset Management is located in the organization structure.
- Techniques to speed implementation and gain institutional and political support.
- Educational programs used for training practitioners in how to apply Asset Management.
- External motivating factors.
- Estimation and documentation of the benefits of comprehensive Asset Management.
- Analysis tools and computer programs being applied (engineering analysis and economic analysis tools)
- Data (What data is collected, how it is collected, how it is shared, to whom it is available, other related issues).
- What Performance Measures and Goals are applied and why they were selected.
- Institutional hurdles.
- Organization integration (horizontal and vertical communication).
- Benefits that have resulted and are expected from the implementation of a Transportation Asset Management Program.
- Asset performance prediction and Remaining Service Life.
- Extent of preservation considerations in the decision-making process.
- Extent of use and integration/linking of management systems.
- How trade-off decisions are made.
- Use of agency legacy files as part of their Asset Management Program.
- Political issues.

Possible State DOTs to be visited: Michigan, Ohio, Florida, North Carolina, Virginia, Washington, and Utah

Possible Local Transportation and Roads Agencies to be visited: Portland, OR and Hillsborough County, FL

Scan Objectives (What key information is to be gained? What information is to be shared after the scan? Who would the audience be for this information?)

The objective of this Domestic Scanning Review is to learn of and document the strategic approaches which the entities to be studied have undertaken in managing their transportation infrastructure. It is important to learn their decision-making process for resource allocation and utilization, this includes the management systems which they are applying, their performance measures, as well as how trade-offs are made between functional areas, and how they make capital improvement and preservation decisions. It is also important to learn how these entities have gained top management and elected official support for their Program. Where possible, learning how trade-offs are made between modes would be significant.

It is important to share the information found on this Domestic Scanning Review with other States and

local entities as Asset Management has moved ahead in recent years in a number of transportation agencies from theory to practical application. Undertaking this review is clearly in line with the Mission of the AASHTO Subcommittee on Asset Management. The Mission is to: "Advance the State-of-the-Practice of Asset Management in State DOT's to optimize resources utilizing performance based goals and measures regarding operation, preservation, and improvement of transportation systems for member agencies." Goals of the Subcommittee include: Develop and document an understanding of Asset Management, how it is being used and how it can be used in the future by member States, as well as undertake appropriate AASHTO/FHWA domestic and international scanning tour(s) and disseminate findings.

The audience of the results of this Scanning Review are State and local transportation agencies. In support of the Vision of the Subcommittee, it is believed that undertaking this review will lead to Asset Management being a standard for State DOTs and others for making investment decisions and managing the nation's transportation system.

Benefits Expected (Including potential impacts on current technology or procedures)

When implemented in State DOTs and local transportation organizations, it is anticipated that they will revise and improve the fundamentals of investment decisions by ensuring that the expenditure of funds will: (1) be based on analysis that considers alternatives across functions, asset classes, and modes; (2) be driven by customer requirements as reflected in performance goals and measures; (3) include economic as well as engineering considerations; (4) incorporate an extended time horizon; and (5) be systematic and fact based. As Asset Management becomes a standard for State DOTs and others for making investment decisions and managing the nation's transportation system, decision making will be based on quality information in line with the Goals and Objectives of the respective Departments with the highest possible levels of customer satisfaction and return-on-investment.

Finally, the Scan will benefit the work of AASHTO, FHWA and TRB in the area of advancing the implementation of Transportation Asset Management. The AASHTO Subcommittee on Asset Management in cooperation with FHWA has identified a broad portfolio of activities intended to promote and facilitate deployment of Transportation Asset Management in State and Local transportation agencies. Results from the proposed Scanning Review will have a positive impact in meeting our goals and refining our activities. Specific products from the Scan will include a written report, presentations at conferences and other venues, and research statements/projects that examine specific tools and/or technologies in great depth and assess their applicability in other State and local transportation entities. The scan results will be posted on the Asset Management Community of Practice website.